SITE SYNOPSIS

SITE NAME: DERRYNAGRAN BOG AND ESKER NHA

SITE CODE: 001255

Derrynagran Bog and Esker NHA is a small site situated 5km north of Moylough, mainly in the townlands of Cloonkeen Eighter, Derrynagran and Cloonagh, in east Co. Galway. This is a raised bog habitat with areas of high bog and cutover.

The high bog consists of one small very wet dome closely associated with two esker ridges to the south-west, one of which protrudes into the dome of the bog. The esker ridge supports species rich calcareous grassland and there is some scrub and deciduous woodland development in places.

Much of the high bog has vegetation typical of Western Midland Raised Bog with Carnation Sedge (*Carex panicea*), Deergrass (*Scirpus cespitosus*) and Cottongrass (*Eriophorum angustifolium*) with very little, scattered Ling heather (*Calluna vulgaris*). The high bog supports a notable variety of bog mosses (*Sphagnum* spp.) with *S. magellanicum* and *S. papillosum* present. The central area is very flat and somewhat quaking and supports a distinctive system of hummocks and pools with carpets of bog moss (especially *S. magellanicum*) extending from the edges. Some of these pools have large, actively-growing hummocks of the scarce bog moss, *S. imbricatum* particularly on islands which have escaped any fire damage. Cranberry (*Vaccinium oxyccocos*) occurs amongst the bog moss cover in places, indicating flush conditions. The scarce and localised plant Brown Beak-sedge (*Rhyncospora fusca*) is abundant in some of the pools.

The main area of cutover occurs to the east, this is a complex of banks and abandoned very wet cutover with regenerating bog mosses and Cottongrass. The lowland dry grassland on the steep-sided esker ridges is species-rich with abundant lime-loving plants such as Mountain Everlasting (*Antennaria dioica*) and Spring-sedge (*Carex caryophyllea*), Carline Thistle (*Carlina vulgaris*), Wild Thyme (*Thymus* sp.), Glaucous Sedge (*Carex flacca*) and many others. Several spikes of the Early Purple Orchid (*Orchis mascula*) are also present. The sward is very closely grazed with 100% cover. In many places Ling Heather occurs indicating less calcareous soil.

Dry, semi-natural woodland occurs on some of the slopes of the eskers, consisting mainly of Hazel (*Corylus avellana*), with some Ash (*Fraxinus excelsior*) and the occasional large Oak tree (*Quercus* sp.). The ground flora is diverse where not trampled by stock. In the south-west corner a small turlough-like pond with a stony shore occurs in a steep-sided amphitheatre of eskers. Part of the esker ridge is heavily improved grassland, but it is included to preserve the hydrology of the site. In a zone between the bog and the eskers there is a species-rich flooded fen grassland with low-growing sedge species such as Yellow Sedge (*Carex flava* agg). This is a possible remnant of a lagg zone which naturally surround raised bogs and are now very rare due to drainage and turf cutting.

Red Grouse, a species that is becoming increasingly rare in Ireland has been recorded on the site.

Current landuse on the site consists of mechanical peat-cutting along the north-west margins. Grazing activities along the margins between esker and bog has lead to poaching damage in this area. Damaging activities associated with this landuse include drainage and burning. Fire damage has been recorded in the 1980s and more recently in a small section along the bog margins. These are all activities that have resulted in loss of habitat and damage to the hydrological status of the site, and pose a continuing threat to its viability.

Derrynagran Bog and Esker NHA is a site of considerable conservation significance comprising of raised bog, a rare habitat in the E.U. and one that is becoming increasingly scarce and under threat in Ireland. This high bog supports a good diversity of raised bog microhabitats including some hummock/hollow complexes and pools. The site shows a transition from bog to esker (both of good quality) including a possible lagg zone, which considerably increases its overall scientific value. Ireland has a high proportion of the total E.U. resource of raised bog (over 50%) and so has a special responsibility for its conservation at an international level.